Cell Transport Objective Sheet

**Tested Objectives**

Bio 1.2.1 Explain how homeostasis is maintained in a cell and within an organism in various environments (including temperature and pH)

Bio 4.1.1 Compare the structures and functions of the major biological molecules (carbohydrates, proteins, lipids, and nucleic acids) as related to the survival of living organisms

Bio 4.2.2 Explain ways that organisms use released energy for maintaining homeostasis (active transport).

**Essential Vocabulary (ALL must be defined for full credit)**

phospholipid, steroid, homeostasis, passive transport, diffusion, osmosis, cell (plasma) membrane, selectively permeable, phospholipid bilayer, transport proteins, concentration gradient, osmotic/turgor pressure, equilibrium, active transport, sodium-potassium pump, facilitated diffusion

**Questions to Master**

1. Describe examples of maintaining homeostasis (balance) in living cells
2. Describe how the structure of the cell membrane allows for the transport of materials. You must draw a picture to support your answer.
3. Explain passive transport
4. List and define the types of passive transport
5. Predict what will happen to cells that are placed in salt water and freshwater environments.
6. Discuss how plant cells experience water loss and water gain differently than animal cells
7. Explain active transport and list the types of active transport
8. Compare and contrast passive and active transport